2009 EETT Competitive Grants

Creating an Electronic Learning Community via 3DM (Data-Driven Decision Making)

Alexandria City Public Schools

Alexandria City Public Schools (ACPS) has received an "Enhancing Education Through Technology (EETT)" federal grant to build an electronic learning community upon a "3DM" controlling principle: data-driven decision making. The 20-month grant (January 2010 to September 2011) will expand the school district's technological infrastructure to improve the following: (1) curriculum design and implementation, (2) student assessment and evaluation, and (3) standards-driven strategic planning. It also will enhance student and family access to technology tools to promote student achievement and engagement in the learning process.

This 3DM process supports the division's strategic planning goals. All major long-range goals and related program elements for the 3DM grant will ensure the sustainability and institutionalization of grant-funded initiatives, processes, and structures. As a result, ACPS will improve its ability to

1. Expand student and family access (e.g., time, range of resources, technical training) to educational technologies to enhance the learning process
2. Track student performance and progress using a comprehensive system of technology-enhanced diagnostic, formative, and summative assessments
3. Monitor and address academic trends, including timely inclusion of evidence-based strategies and interventions into curriculum, assessment, and instructional practices
4. Facilitate the evaluation of program and curriculum effectiveness, including value-added studies of the impact of technology-based interventions upon aggregate and disaggregated student achievement results
5. Support administrators and teacher leaders' efficient management of school resources, including teacher assignments, professional learning, and specialized student services
6. Ensure the effectiveness of curriculum design and development processes, supporting teacher and administrative understanding of course- and grade-level desired results, recommended assessment practices, and criteria for effective unit and lesson plan design

Perhaps most significantly, this grant will support the following ACPS strategic planning goals: (1) ensure that all students demonstrate significant academic growth and dramatically improve achievement outcomes for students below grade level and (2) provide a rigorous, relevant, and internationally benchmarked education to enable all students to succeed as citizens in the global community.

Radford iLearn Project

Radford University

Recently published educational technology articles have described four technological trends that likely will have a significant impact on how educators teach in the 21st century classroom. These trends relate directly to the availability of (1) virtually limitless, free, keyword-searchable information (e.g., Google search); (2) Wi-Fi-enabled locations-aware mobile technologies (e.g., smartphones, iPod touch); (3) Web 2.0 technologies (e.g., wikis, blogs, social networking); and (4) handheld and desktop games and simulations (Dede, 2005; 2009; Bonk, 2009). In addition, the latest reports from the Virginia Department of Education (VDOE) emphasize that teachers and schools should leverage emerging technologies to improve fundamental knowledge in core target areas and "increase problem-solving skills using a wide range of emerging technologies for communication and computing."

The iLearn project addresses these priorities by creating engaging and effective learning environments that leverage emerging mobile and Web 2.0 technologies to enhance the efficacy of the participating teachers in southwestern Virginia. The proposed project is a collaboration among Pulaski County Public Schools, Radford City Public Schools, New River Community College, Apple Inc., and Radford University. It includes three major components: (1) location-aware mobile games and simulations, (2) iPod touch applications, and (3) pre-service and in-service professional development and education.

Partnership to Advance Smaller Technology Integration into Mathematics and English

Roanoke City Public Schools

The Partnership to Advance Smaller Technology Integration into Mathematics and English (PASTIME) is a collaboration between Roanoke City Public Schools and Lynchburg City, Roanoke Catholic, New Vistas School, Virginia Tech, and Apple. It extends the reach of the state's successful *Learning without Boundaries* initiative.

PASTIME will use the iPod touch as a practical alternative to more expensive and less portable technological resources; this concept takes advantage of students' interest in hand-held computing devices for playing games and communicating with friends. It offers the benefit of low-cost or no-cost applications for teaching and learning. The project will identify "best of breed" iPod applications, develop lesson plans using the iPod, and create professional development modules. The results will be made available to other divisions across the state.

The Civil War Sesquicentennial Initiative

Shenandoah Valley Technology Consortium

In commemoration of the Civil War sesquicentennial, SVTC's program will explore the rich history of the Shenandoah Valley through technology-based cross-curricular learning projects that address state content standards, national technology standards, and 21st century skills. To support this initiative, we will provide SVTC educators—administrators, technology leaders, and teachers—with the skills, support, and resources needed to integrate technology into instruction. The program will engage the latest technologies to create and widely disseminate original digital content by teachers and students.

The program will benefit educators throughout Virginia in several ways. SVTC will pilot the Virginia Content Repository, an online community where educators can find lessons, video tutorials, and student projects that employ technology to enhance instruction at all grade levels and in all content areas. Once the pilot is completed, all Virginia educators will be able to submit content based upon SVTC's submission guidelines and management model. Similarly, SVTC will update the online NETS•T certification system with refreshed standards and supporting materials; once completed, this system could be made available for licensing throughout the state.

Finally, SVTC's Civil War Sesquicentennial Initiative could serve as a model for capturing the attention and excitement of teachers and students in other locales and encourage the use of technology to create innovative, authentic educational projects.

WHRO Technology Consortium Project

The WHRO Technology Consortium will complete the development of leading-edge media-rich online student courses including astronomy, chemistry, world geography, world history I and II, oceanography, physics, and health/physical education 9 and 10. Specific media-rich elements will include audio and video segments, mobile device applications, augmented reality, interactive Flash elements, podcasts, games, and simulations, all of which will be made available as standalone learning objects through VideoClassroom™, Virginia on iTunes U, and the Virginia Content Repository, among others. Specifically, the project will achieve the following:

- Develop an online diagnostic self-assessment for students to help identify and correct areas of weakness to assure technology proficiency by eighth grade
- Offer an "Online Teaching Methodology" professional development course to provide teachers with the skills they need to be successful teachers in the online K-12 environment
- Purchase digital rights in perpetuity, digitize, segment, correlate to Virginia standards, and upload an additional 150 hours of high-need content to VideoClassroom™ and tightly integrate that content into the courses being developed
- Provide official PBS TeacherLine ISTE NETS•T Certification, including graduate credit if desired, to up to 200 instructional technology resource teachers (ITRT) and media specialists

In addition, the project will provide PBS's TeacherLine Peer Connection to all ITRT statewide. This online resource combines online communication and collaboration with valuable content. Instructional coaches can use this rich, flexible set of tools to locate and share appropriate professional development resources with educators across the state.

VIRGINIA DEPARTMENT OF EDUCATION
DIVISION OF
TECHNOLOGY & CAREER EDUCATION
OFFICE OF EDUCATIONAL TECHNOLOGY

For more information, contact:

Tammy McGraw, Ed.D. • Director of Educational Technology
Virginia Department of Education • 804.225.4429
tammy.mcgraw@doe.virginia.gov